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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,060	09/29/2003	Stephen Fitzgerald	CE-COMP-04.US	4727
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MILTON, GELLER, LLP 700 - 225 METCALFE STREET OTTAWA, ON K2P-1P9 CANADA			EXAMINER GRAHAM, MARK S	
			ART UNIT	PAPER NUMBER
			3711	
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			06/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/672,060	<b>Applicant(s)</b> FITZGERALD ET AL.	
	<b>Examiner</b> Mark S. Graham	<b>Art Unit</b> 3711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-30,33-45,52-56,60-69 and 72 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 14-30,33-45,52-56,60-69 and 72 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 14-30, 33-36, 40, 52, 55, 56, 60/55, 60/56, 61/55, 61/56, 62, 63/55, 63/56, 64/63/55, 64/63/56, 65/63/55, 65/63/56, 66/63/55, 66/63/56, 67/55, 67/56, 68/55, 68/56, 69/55, 69/56.

Continuation of Disposition of Claims: Claims rejected are 38, 53, 60/53, 61/53, 67/38, 67/53, 68/38, 68/53, 37, 39, 54, 60/54, 61/54, 67/37, 67/39, 67/54, 68/37, 68/39, 68/54, 42/( 37, 38, 39), 43/42/(37, 38, 39), 44/42/( 37, 38, 39), and 45/42/(37, 38, 39), 63/53, 63/54, 64/63/53, 64/63/54, 65/63/53, 65/63/54, 66/63/53, 66/63/54, 72/60/53, 72/60/54, 69/53, and 69/54 .

Applicants' remarks are directed initially towards the restriction requirement originally made 8/31/05. It is applicants' contention that the description of the elected Fig. 6 embodiment as set forth in paragraph 64 of the original specification was inclusive of the wall structure of the bat being varied by fiber type, and/or angle change and or composite thickness to achieve increased radial stiffness in the sweet spot area. While it is still the examiner's opinion that the restriction was properly directed to the actual description of Fig. 6 found in the first sentence of paragraph 64 and that this was the embodiment elected by the applicant, the examiner in this action has included this aspect of the Fig. 6 embodiment in the claims examined in the instant application in an attempt to advance prosecution of the application. In so doing the examiner has again reviewed the original disclosure including the specification, drawings, abstract, and claims, to see which of the currently pending claims read on the Fig. 6 embodiment.

Based on original claim 13, the examiner agrees that the 5% limitation is adequately supported within the Fig. 6 embodiment. As was previously determined by the examiner, a midsection sweetspot length of 12.5% to something less than 100% is supported within the Fig. 6 embodiment by virtue of the paragraph 16 text discussing the sweetspot length vs. the barrel length for the bats of the invention. However, because each of claims 41-45, 63-66, and 72 are inclusive of values less than 12.5% they have been rejected under 35 U.S.C. 112 first paragraph, which is set forth below, as containing new matter.

The original text of paragraph 62 and applicants' subsequent attempts to amend it have also been reviewed for any basis which might be applied to the Fig. 6 embodiment.

In response to applicants' remarks on page 7, the examiner in the 2/7/06 rejection made very clear that the language pertaining to the link between the barrel wall thickness as disclosed with regard to Fig. 6 and the stiffener thickness as originally disclosed was considered new matter. Obviously this includes introductory language such as stating that the stiffener and barrel thickness vary to "the same extent and manner."

In particular regarding this issue, the disclosed thickness of the stiffener and the statement that an alternative solution is to use a thickened barrel have been reconsidered. However, it is the examiner's opinion that one cannot necessarily read that when using a thickened barrel to achieve an "alternative solution" the exact same thickness used when using a stiffener should also be used. There is certainly no statement to this effect, and there is no discussion of what differences or similarities might occur in the "alternative solution" depending on what thickness of barrel is used. Further, some inherent structural differences would have to be present between an insert which is bonded to a bat, and a bat which is constructed with simply thicker material. Therefore, claims based on the .005" to .040" thickness must be considered to be directed at the stiffener embodiments alone.

Likewise, the "flattened batting performance" graph language of claims 14-30, 33-36 and 52 pertains solely to the embodiments utilizing a stiffener element.

Art Unit: 3711

Paragraph 60 of the original disclosure is very specific in stating that Figure 10 pertains to an example with a stiffener element. Applicants' attempt to bootstrap the language of paragraph 62 into the description of the Fig. 6 embodiment are not persuasive as explained above, and the further jump to suggest that the "alternative solution" will also provide the graph depicted in Fig. 10 is completely unsupported in the original disclosure.

The 1" to 3" language of claim 62 contains the same problem. It can only be supported by making the assumption that each dimension disclosed with regard to the stiffener necessarily follows with regard to a barrel region as disclosed with regard to the Fig. 6 embodiment. For the reasons explained above, this assumption is not tenable.

Regarding the 8 1/3% language of claim 40, such still lacks support in the original disclosure for the reasons explained in the 2/7/06 paper and the applicant still has shown no basis for this language with regard to the Fig. 6 embodiment. Therefore, claim 40 remains withdrawn as not being directed towards the elected Fig. 6 embodiment.

The amendments filed 10/6/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The disclosure with regard to Fig. 6 in paragraph 62 lacks basis in the original disclosure and thus represents new matter. The thickness specifically discussed in the

Art Unit: 3711

original disclosure only pertain to the embodiments having a stiffener 18. The Fig. 6 embodiment does not offer this feature but instead includes a section 20 of the bat which adjusts the stiffness by means of fiber type or angle change or barrel thickness with no discussion of any particular barrel thickness. Again, the more narrowly focused ranges of the stiffener wall thickness, and the inclusion that the barrel wall thickness is also in these ranges represents subject matter with no support in the original disclosure.

The newly added limitations to original paragraph 53 pertaining to the boundary represent new matter. There is not support for forming the thickened portion such that no boundary is present between layers. Such would not be an inherent feature because to thicken the barrel wall some extra layer of fiber composite material could have been used which would necessarily have a boundary between itself and the underlying wall portion.

The newly added limitations to paragraph 64 represent new matter. There is not support for using "layout density" to modify the barrel wall characteristics with regard to the Fig. 6 embodiment. It is agreed that the term "layout density" is adequately supported in the original disclosure.

Newly added Figs. 6.1-6.3 contain new matter. Regarding the Figs. Of 6.1 and 6.3 there is no original disclosure of a thickened portion shaped as shown in the drawings. In Fig. 6.2 there is not original disclosure of a tapered inner wall at the junction of the barrel and the bat taper. No new drawings have been filed since those received on 6/7/06. Applicant is correct in assuming that the 6/7/06 drawings have not been entered.

Art Unit: 3711

Applicant is required to cancel the new matter in the reply to this Office Action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 41-45, 63-66, and 72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As pointed out above, while there is support for lengths between 12.5% and close to 100% of the length of the barrel concerning the mid-section there is not support for less than 12.5% with regard to the Fig. 6 embodiment. Each of the claims is inclusive of this range and therefore contains new matter with regard to the original disclosure.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 38, 53, 60/53, 61/53, 67/38, 67/53, 68/38, 68/53 are rejected under 35 U.S.C. 102(e) as being anticipated by Vacek. Vacek's insert 112 provided in the center of the barrel contains layers of fibers and thus this portion of the bat barrel has a greater



Art Unit: 3711

percentage of fibers than do the portions of the barrel at either end of the insert.

Inherently this provides the bat with greater radial stiffness at the location of the insert and Vacek specifically points out in paragraph 45 that the insert is to be stiffer than the tubular hitting surface and that it enhances the hitting zone of the bat by increasing the trampoline effect. This is considered an increased or broadened sweet spot. This increased stiffness of the bat at the location of the insert relative to the portions of the bat barrel not covered on the inside by the insert is a change along the barrel length as in the present invention. As can clearly be seen in Fig. 2 of Vacek the insert does not extend the full length of the barrel and thus the properties of the barrel are varied in the same fashion as claimed.

Regarding claims 67/38 and 67/53 insert 112 is considered to be inserted into a single wall bat.

Concerning claims 68/38 and 68/53 the innermost layer of insert 112 is considered to be inserted into a multi-wall bat formed by the outer layers of insert 112 and the bat barrel into which it is inserted.

In response to applicants' remarks concerning Vacek and its applicability, the examiner points out that it has the same barrel structure as that being claimed by the applicant. Therefore, if Vacek's bat description is "misleading" and his bat decreases "trampoline effect" than applicants' claimed bat will possess these same attributes. Because Vacek does disclose the same barrel structure as that claimed by applicant it inherently does possess all of the attributes of applicants bat and therefore anticipates it.

Regarding the "sweet spot" a sweet spot is considered that portion of the bat upon which it is preferential to hit the ball. Vacek is directed at increasing the trampoline effect in the area in which his sleeve is supplied. Thus, the preferred hitting area relative to the area not having the sleeve is increased with the insert.

Applicants' assertion on page 20 of the remarks that Vacek's insert must extend fully to the taper and simply is not shown due a probable draftsman's mistake is completely without merit. Vacek is specifically using the insert to increase the trampoline effect where it is placed. There is no reason to try to increase it at the taper.

In further response to applicants' remarks, the portion of the barrel into which the end cap is inserted is capable of striking the ball, (and often does so) and therefore what is intended of this portion of the barrel is not relevant.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37, 39, 54, 60/54, 61/54, 67/37, 67/39, 67/54, 68/37, 68/39, 68/54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vacek. Vacek teaches providing greater stiffness to the bat in the area of the insert. Vacek specifically teaches using a greater percentage of fibers in this area at paragraph 47. However, Vacek also notes that different materials may be used in the insert (paragraph 46) and that the fiber angle may be varied (paragraph 47). Varying the angle of fibers to be greater with regard to the longitudinal axis inherently provides greater radial stiffness and using a

Art Unit: 3711

stiffer fiber type accomplishes the same result. It would have been obvious to one of ordinary skill in the art to have used either of these known means to provide the extra stiffness in the insert portion desired by Vacek. As the examiner has noted previously, different fibers comprise different stiffnesses. Such is now admitted prior art.

Concerning claim 54, Vacek does not specifically disclose the relative thicknesses of the midpoint and lateral regions. However, given the breadth of the range claimed and the fact that no particular unexpected result is provided pertaining to the "at least 5%" limitation it would have been obvious to one of ordinary skill in the art to have used such a range depending on the strength desired in the bat.

Applicant's remarks regarding claims 37 and 39 do not add to those with regard to claim 38 and the examiner's response is the same as explained above.

Claims 42/( 37, 38, 39), 43/42/(37, 38, 39), 44/42/( 37, 38, 39), and 45/42/(37, 38, 39), 63/53, 63/54, 64/63/53, 64/63/54, 65/63/53, 65/63/54, 66/63/53, 66/63/54, 72/60/53, 72/60/54, 69/53, and 69/54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vacek in view of Fritzke. Vacek discloses the claimed device with the exception of the shorter length of the midsection. Fritzke however discloses that such inserts may be shorter and located at the point of the sweet spot of the bat. While an exact length relative to the barrel length is not disclosed, it is clear from Fritzke's drawings that his insert provides the greatest radial stiffness at the sweet spot just as does applicants insert. Absent a showing of unexpected results the exact length of the mid-section would obviously have been up to the ordinarily skilled artisan depending on the particular bat characteristics desired by the batter in the bat.

Art Unit: 3711

Regarding claim 69, Fritzke teaches that composite inserts 44 and 46 may be used in conjunction in a graduated fashion to achieve the desired stiffness in the bat.

In response to applicants' comments regarding Fritzke, Fritzke at paragraph 76 states that composite layer insert 44 is about 8.5 inches long and composite insert layer 46 is about 4 inches long. Moreover, Fritzke teaches in paragraph 75 that composite bands of varying lengths may be used to allow the manufacturer to selectively add strength and stiffness where it is needed. Such bands may be applied to the impact portion or to an insert.

Further, as applicant notes, Fritzke in paragraph 8 at least contemplates the use of composite bat frames in regards to his invention. While this is not his preferred solution it is at least contemplated. Therefore, taking Fritzke with Vacek teaches that the use of smaller tailored composite reinforcing bands within a composite bat would surely have been obvious to the ordinarily skilled artisan. Again, as applicant provides no showing of unexpected results the exact length of the mid-section would obviously have been up to the ordinarily skilled artisan depending on the particular bat characteristics desired by the batter in the bat.

Regarding applicant's comments as to Vacek and Fritzke taken together, in both cases the aim of using an insert is to stiffen the impact portion of the bat, (note paragraph 45 of Vacek and paragraph 75 of Fritzke. Also in both, the aim is to increase the "trampoline" (Vacek) or "spring" (Fritzke paragraph 69) effect in the bat. In both cases a composite insert is utilized. One of ordinary skill in the art considering the art as a whole would obviously conclude that because it was known to use composite

Art Unit: 3711

inserts to stiffen composite bats as taught by Vacek the use of other composite inserts known in the bat art to stiffen hollow bats as disclosed by Fritzke would also be useful to stiffen hollow composite bats.

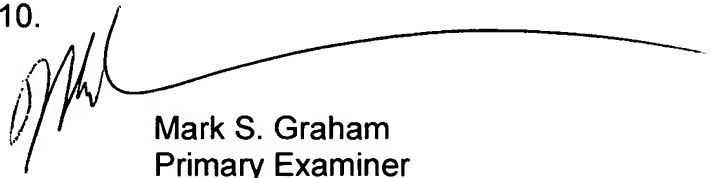
Applicant's arguments with respect to claims 37-39 and the claims dependent thereon have been considered but are moot in view of the new ground(s) of rejection and the reasons expressed above.

Regarding the request for an interview such is once more noted as it was in the 10/31/06 communication. Again, two formal interviews have already been held on this application on the issues presented by applicant, as well as several informal discussions. If applicant has any questions regarding the instant action he is free to contact the examiner.

As a final note with regard to applicant's comments on page 3 of the remarks, the reason that claims may not appear on the cover sheet and instead carry over to the continuation sheet is due to the sheer volume of claims applicant currently has pending in the application.

Any inquiry concerning this communication should be directed to Mark S. Graham at telephone number 571-272-4410.

MSG  
6/19/07



Mark S. Graham  
Primary Examiner  
Art Unit 3711